

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 15311 - L2 Version 2
Chandra X-Ray Center

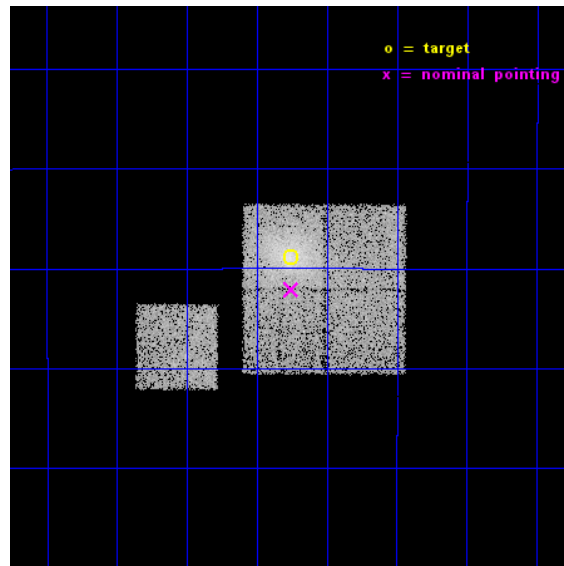
L2 Processing Date : Dec 11 2014

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1 Front

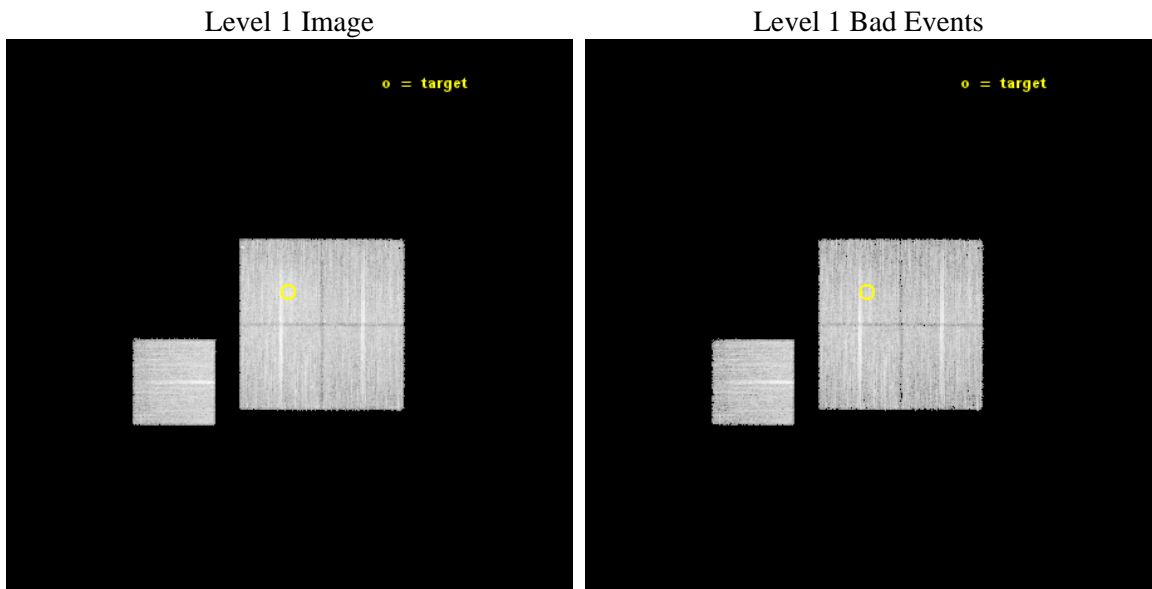
seq_num	801344	Sequence number
obs_id	15311	Observation id
title	Characterizing the Most Massive Clusters in the z	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	G280.19+47.81	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	177.44	Observer's specified target RA [deg]
dec_targ	-12.314	Observer's specified target Dec [deg]
ra_nom	177.43822085103	Nominal RA [deg]
dec_nom	-12.368378962623	Nominal Dec [deg]
roll_nom	270.20830852848	Nominal Roll [deg]
revision	2	Processing version of data
ontime	18082.30013907	Sum of GTIs [s]
livetime	17846.041575757	Livetime [s]
ontime0	18082.30013907	Sum of GTIs [s]
ontime1	18082.30013907	Sum of GTIs [s]
ontime2	18079.159078836	Sum of GTIs [s]
ontime3	18082.30013907	Sum of GTIs [s]
ontime6	18082.30013907	Sum of GTIs [s]
l2events	53119	Number of level 2 events



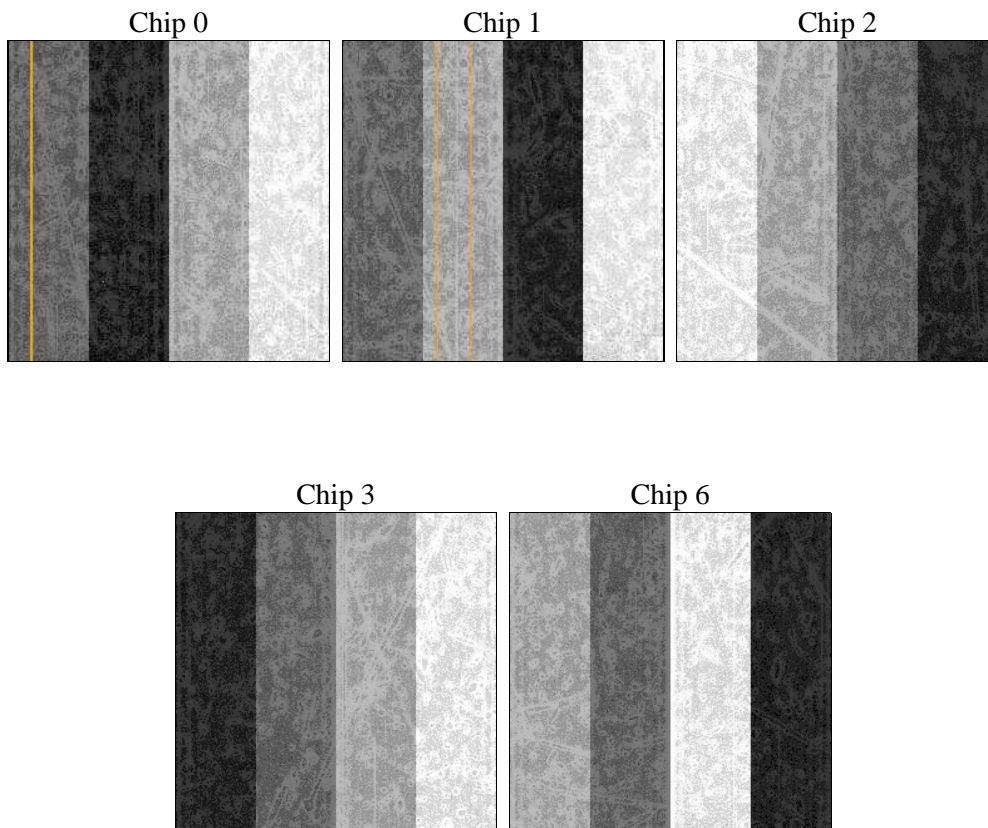
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	18000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	18082.30013907	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	18082.30013907	Sum of GTIs [s]
date	2014-12-11T09:33:27	Date and time of file creation	ontime1	18082.30013907	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	18079.159078836	Sum of GTIs [s]
			ontime3	18082.30013907	Sum of GTIs [s]
			ontime6	18082.30013907	Sum of GTIs [s]
			l1events	422510	Number of level 1 events

2.1.4 Events

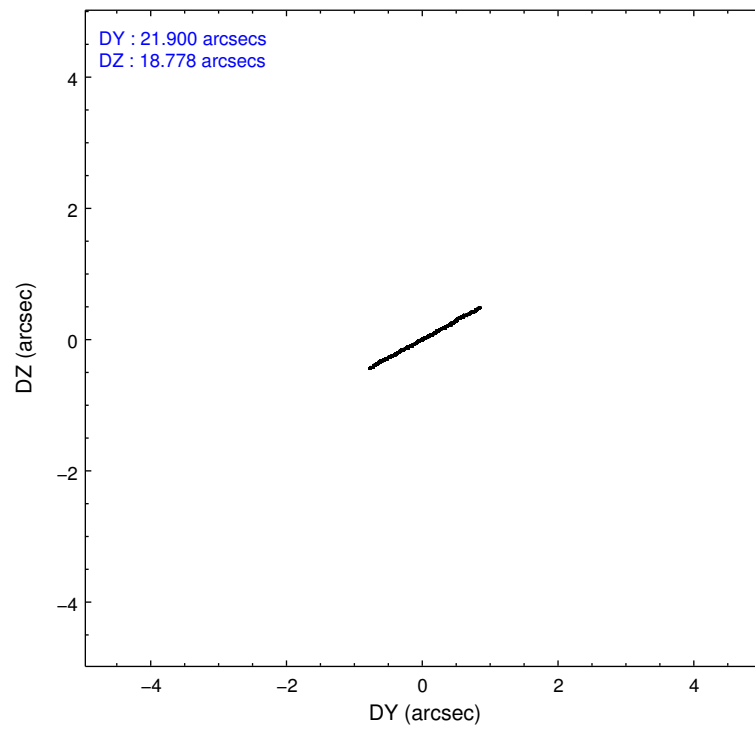
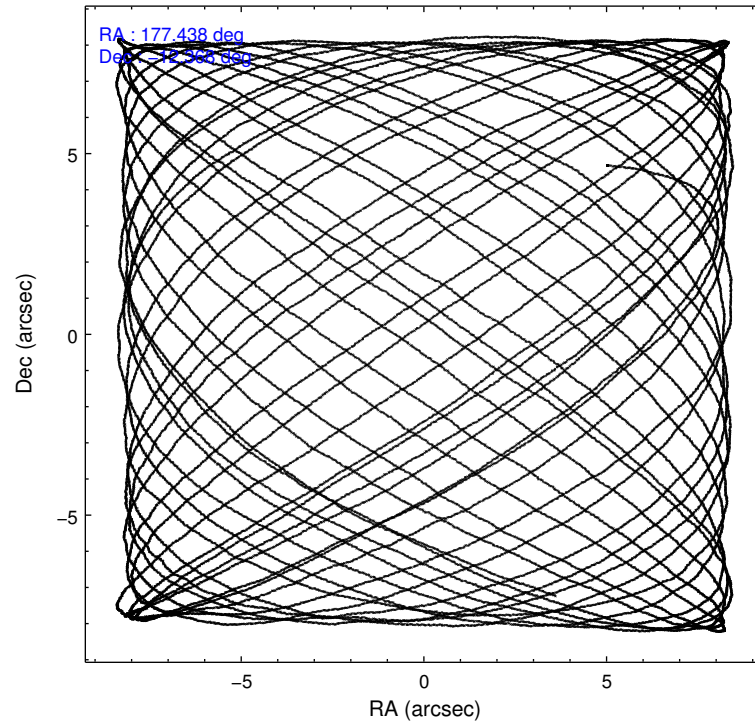
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	75813	80328	88183	92744	85442
rejected events	65733	68941	78185	73316	75392
rejected %	86%	85%	88%	79%	88%

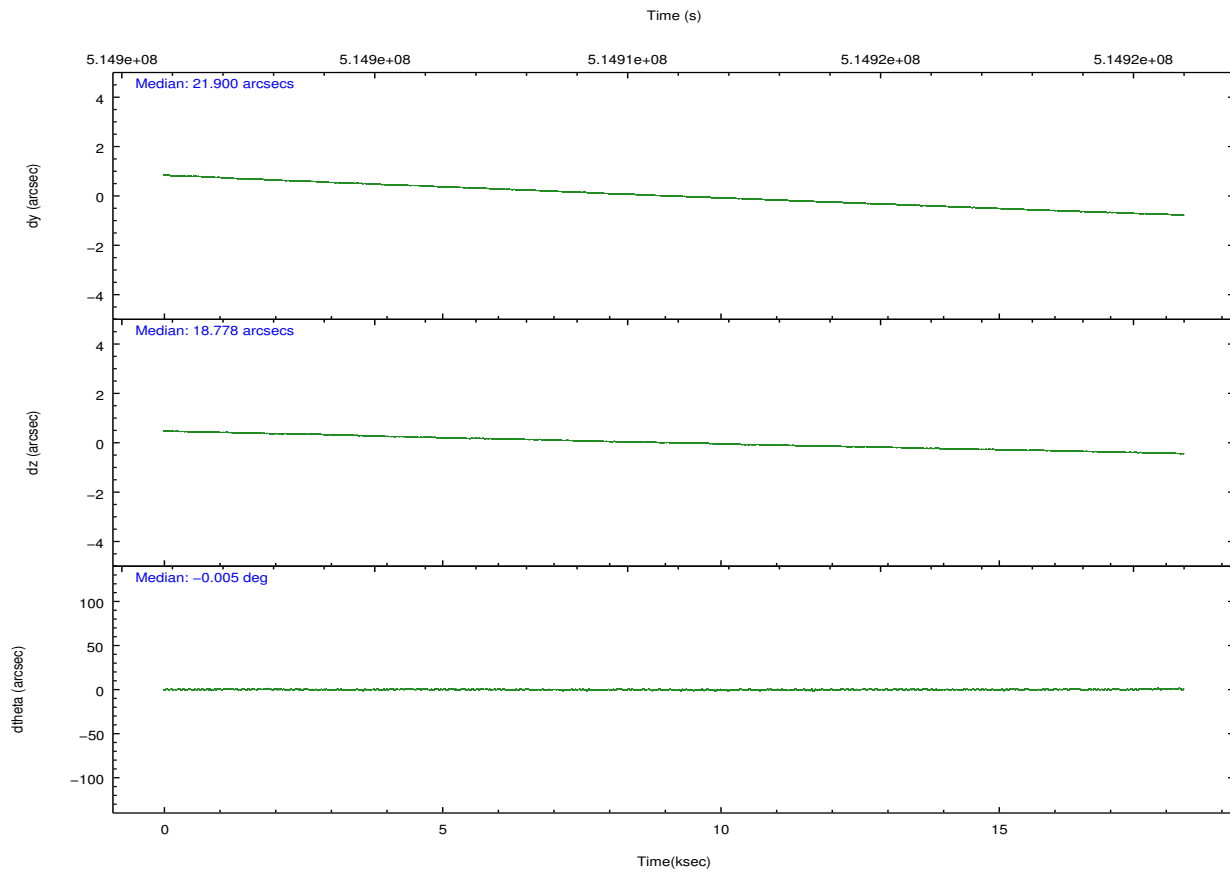
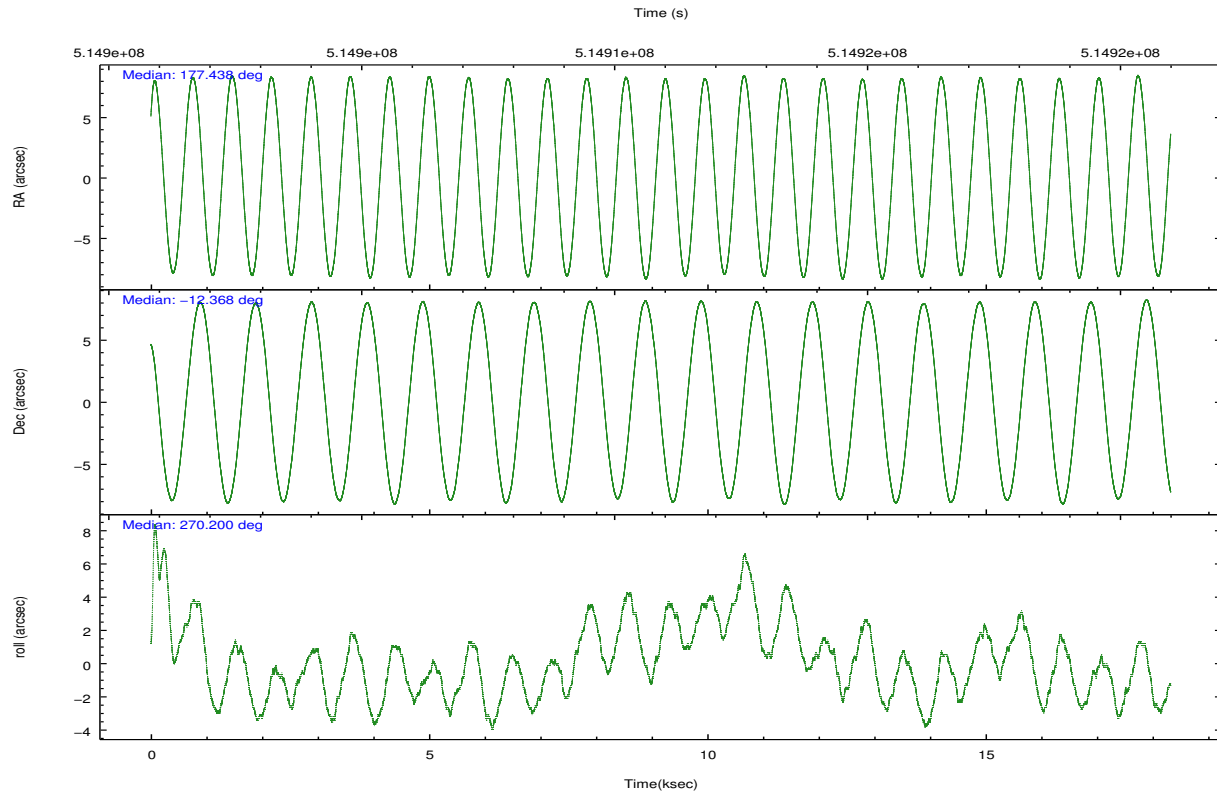
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	3477	4185	3924	11288	3264
	4%	5%	4%	12%	3%
grade 1 events	36	35	41	72	35
	0%	0%	0%	0%	0%
grade 2 events	2412	2596	2286	3149	2378
	3%	3%	2%	3%	2%
grade 3 events	1053	1002	936	1308	1019
	1%	1%	1%	1%	1%
grade 4 events	961	1010	1010	1368	966
	1%	1%	1%	1%	1%
grade 5 events	3884	4116	3651	4504	4207
	5%	5%	4%	4%	4%
grade 6 events	2184	2594	1845	2320	2430
	2%	3%	2%	2%	2%
grade 7 events	61806	64790	74490	68735	71143
	81%	80%	84%	74%	83%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	177.423966	177.4382208510332	CCD I2 on	Y	Y
[deg] Pointing Dec	-12.344669	-12.36837896262278	CCD I3 on	Y	Y
[deg] Pointing Roll	269.996565	270.2083085284806	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-225.840463	-225.8458576473255	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.752	-7.746595355604228	CCD S4 on	N	N
[s] Observation start time (MET)	514902074.184000	514901066.03102	CCD S5 on	N	N
Observation start date	2014-04-26T12:20:07	2014-04-26T12:04:26	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	514920074.184000	514920672.2321	On-chip summing requested	N	N
Observation end date	2014-04-26T17:20:07	2014-04-26T17:31:12	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





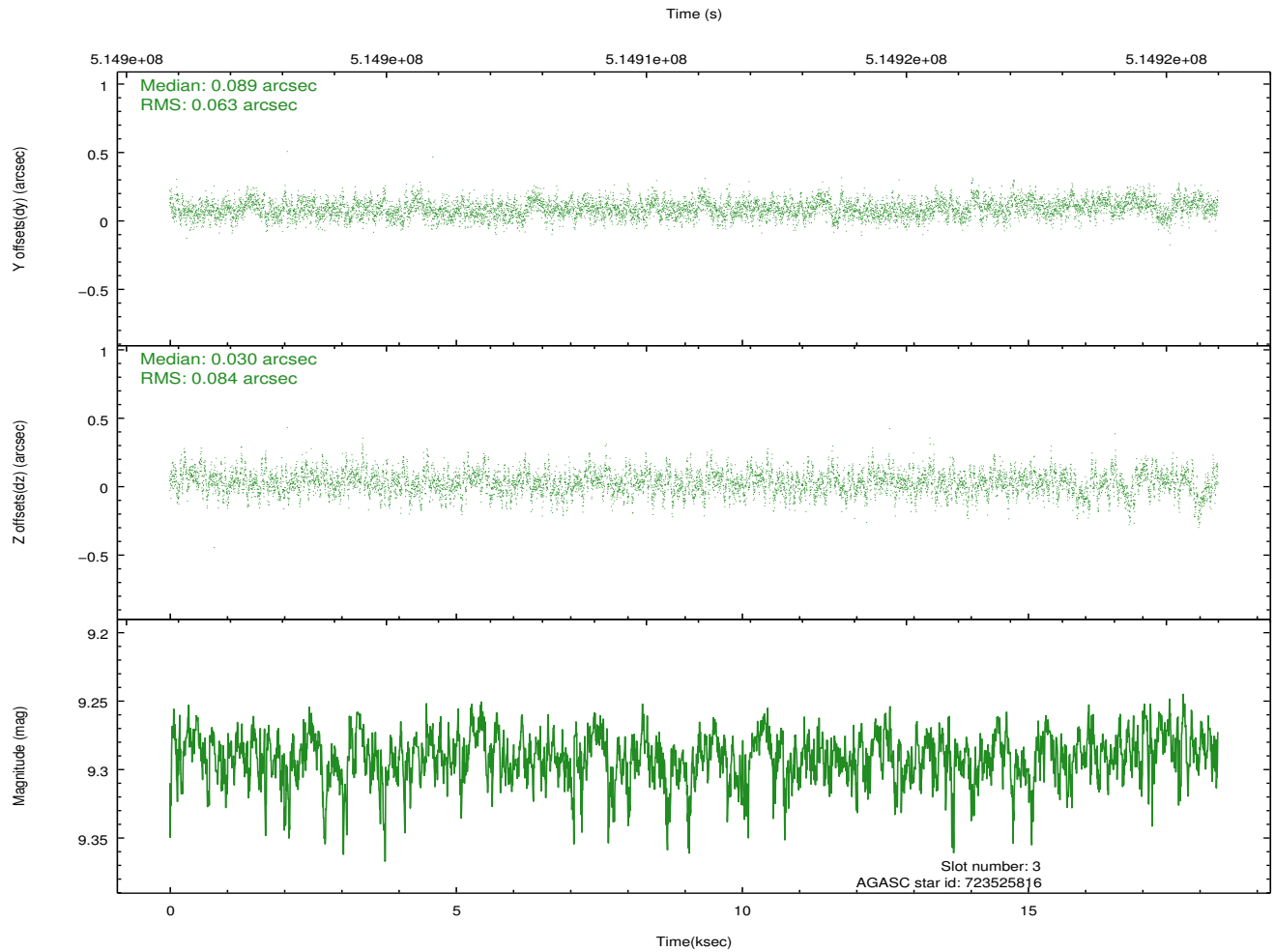
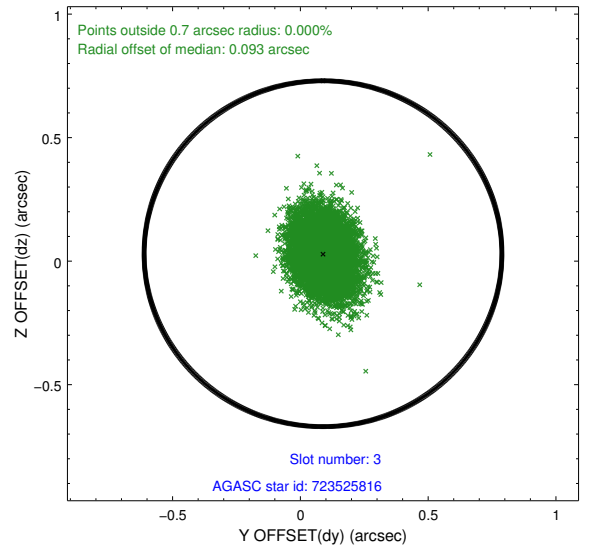
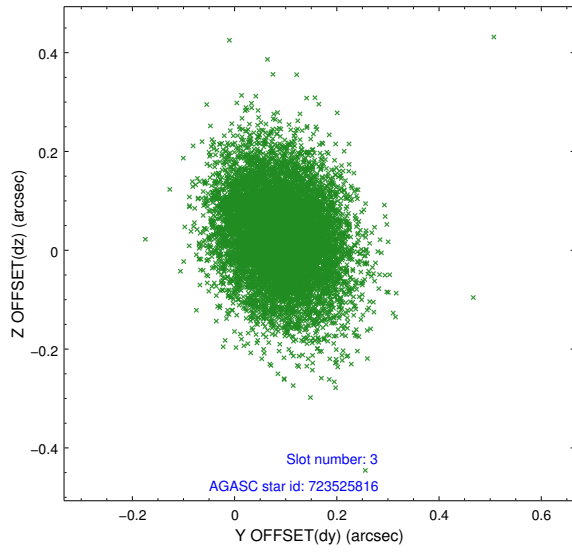
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.23	4469	0.148	-0.107	0.011	0.020	0.000000	0.000000	917.42	-1001.57
1	FID		ACIS-I-5	7.22	4468	-0.371	0.099	0.016	0.025	0.000000	0.000000	-1831.19	895.83
2	FID		ACIS-I-6	7.23	4469	0.131	0.079	0.022	0.034	0.000000	0.000000	382.57	1540.69
3	GUIDE	used	723525816	9.29	8935	0.089	0.030	0.110	0.185	177.127363	-12.455272	399.40	-1042.68
4	GUIDE	used	723532096	6.59	8939	-0.153	0.234	0.090	0.146	177.841242	-12.187813	-564.25	1464.78
5	GUIDE	used	723911536	8.88	8934	-0.048	0.100	0.098	0.162	177.652395	-12.706528	1302.99	801.60
6	GUIDE	used	723913920	9.37	8933	0.036	-0.616	0.157	0.255	177.358146	-12.810351	1677.07	-231.41
7	GUIDE	used	723911792	9.45	8927	0.075	0.251	0.142	0.282	177.108793	-13.013796	2410.36	-1105.00

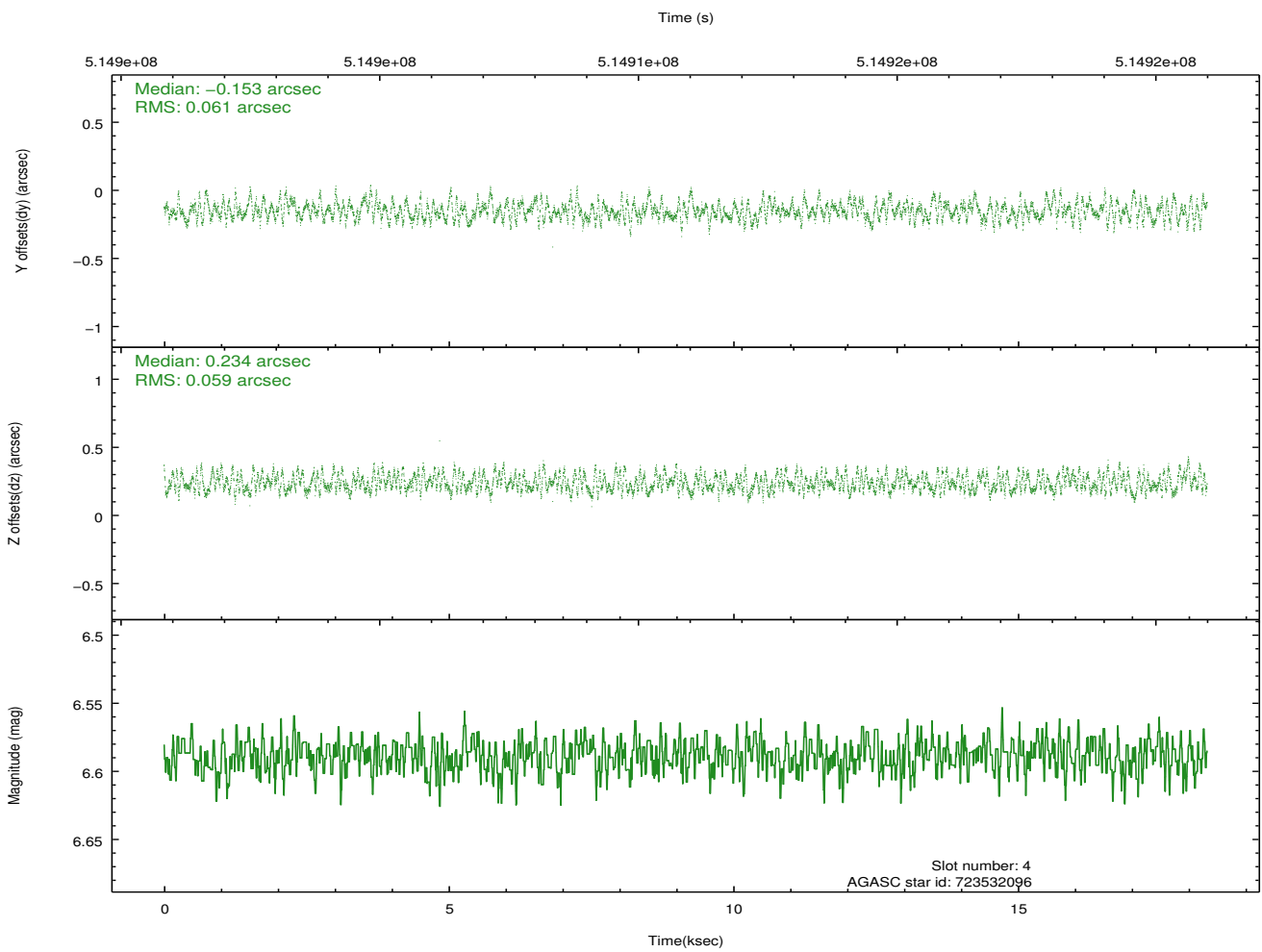
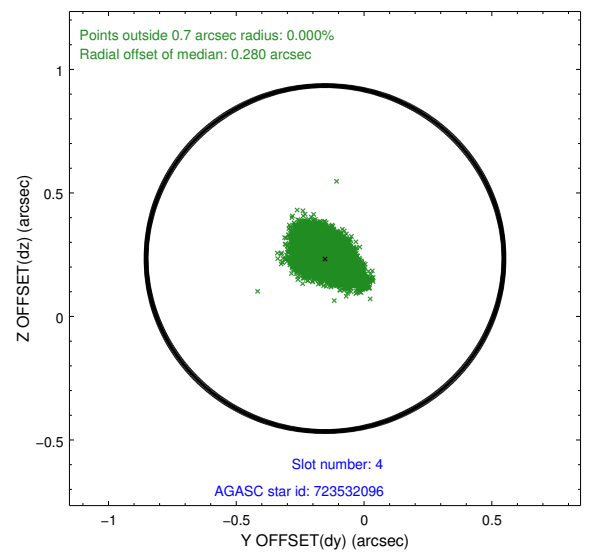
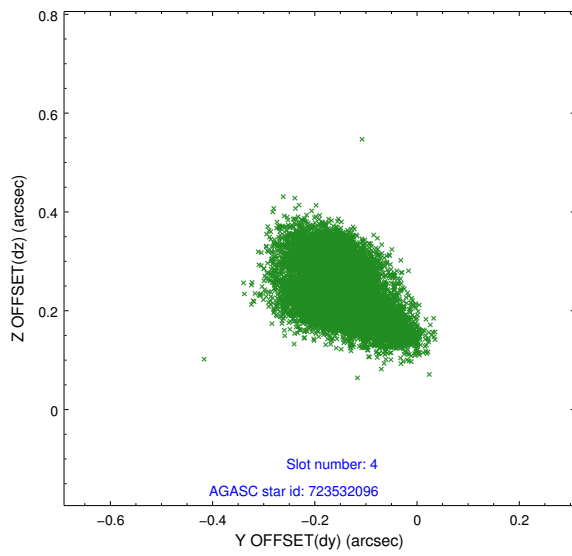
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2.4 Star Slots

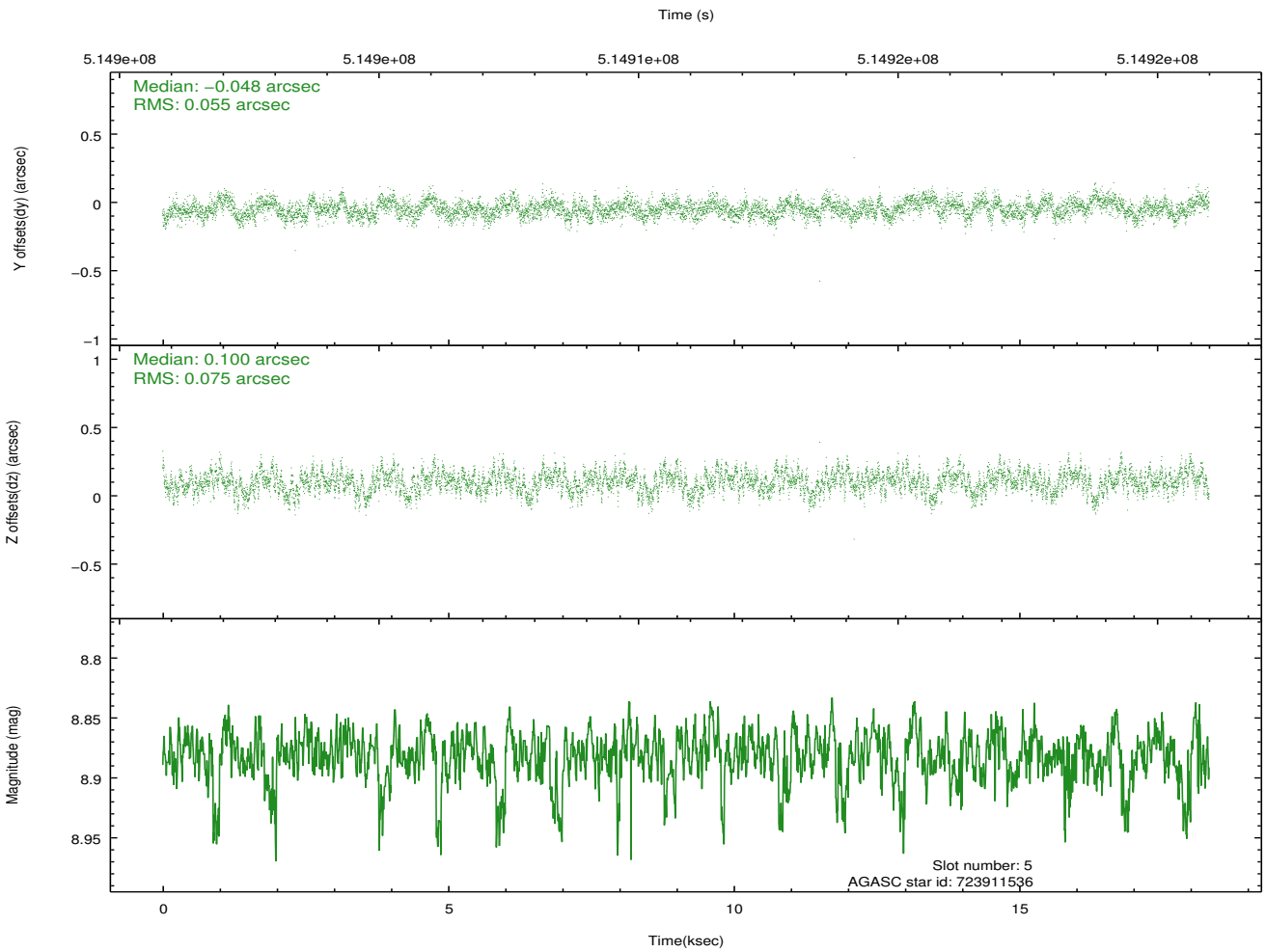
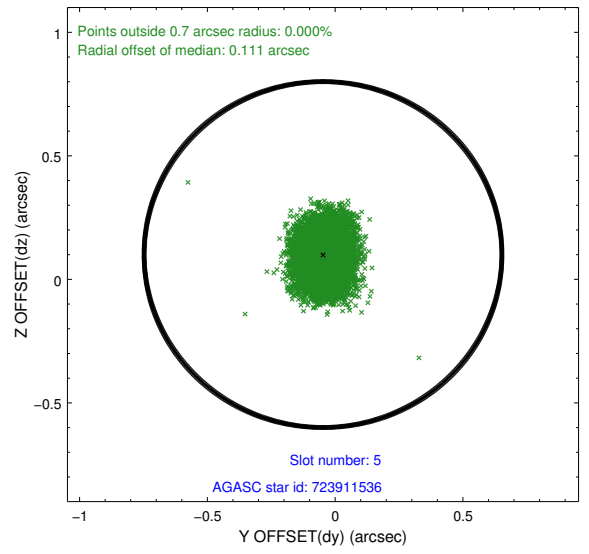
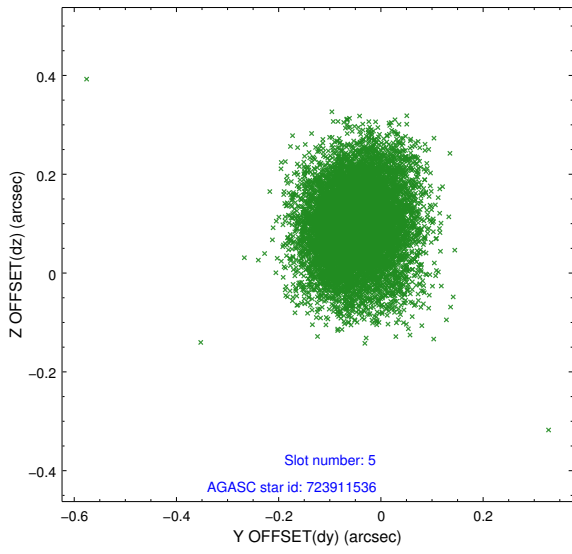
2.4.1 Slot 3



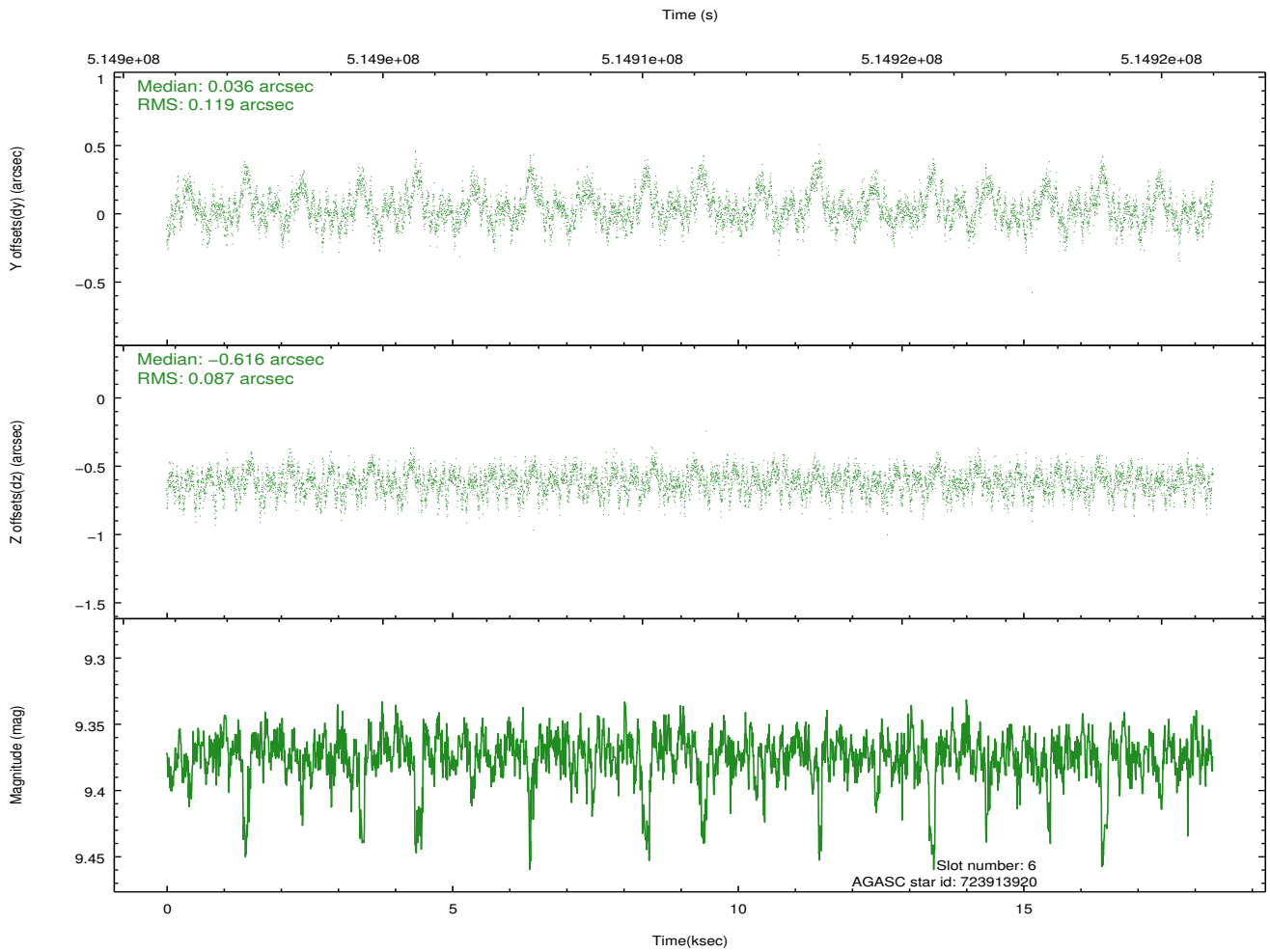
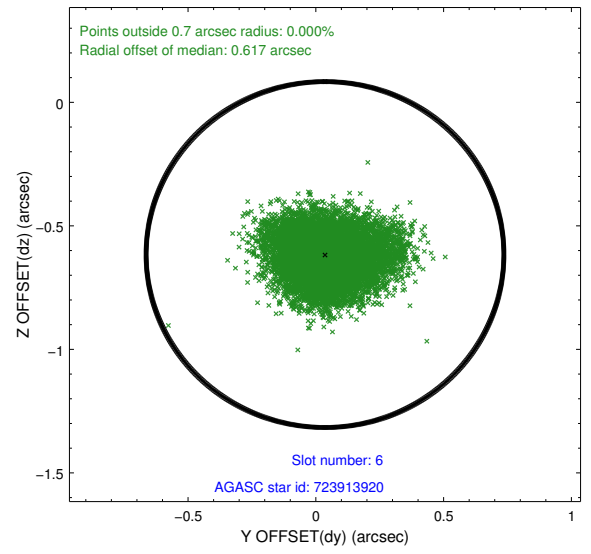
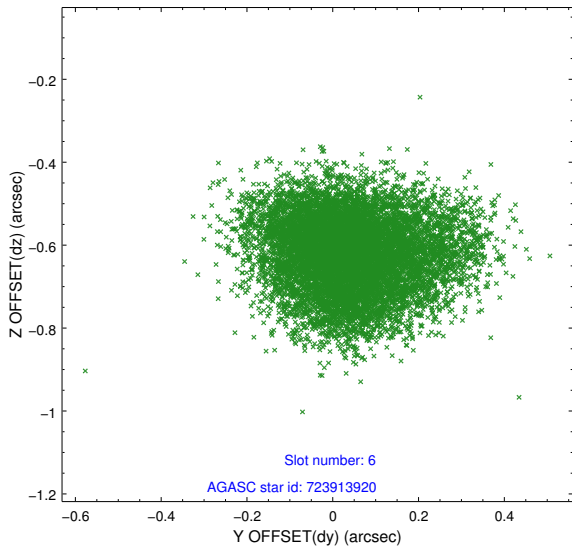
2.4.2 Slot 4



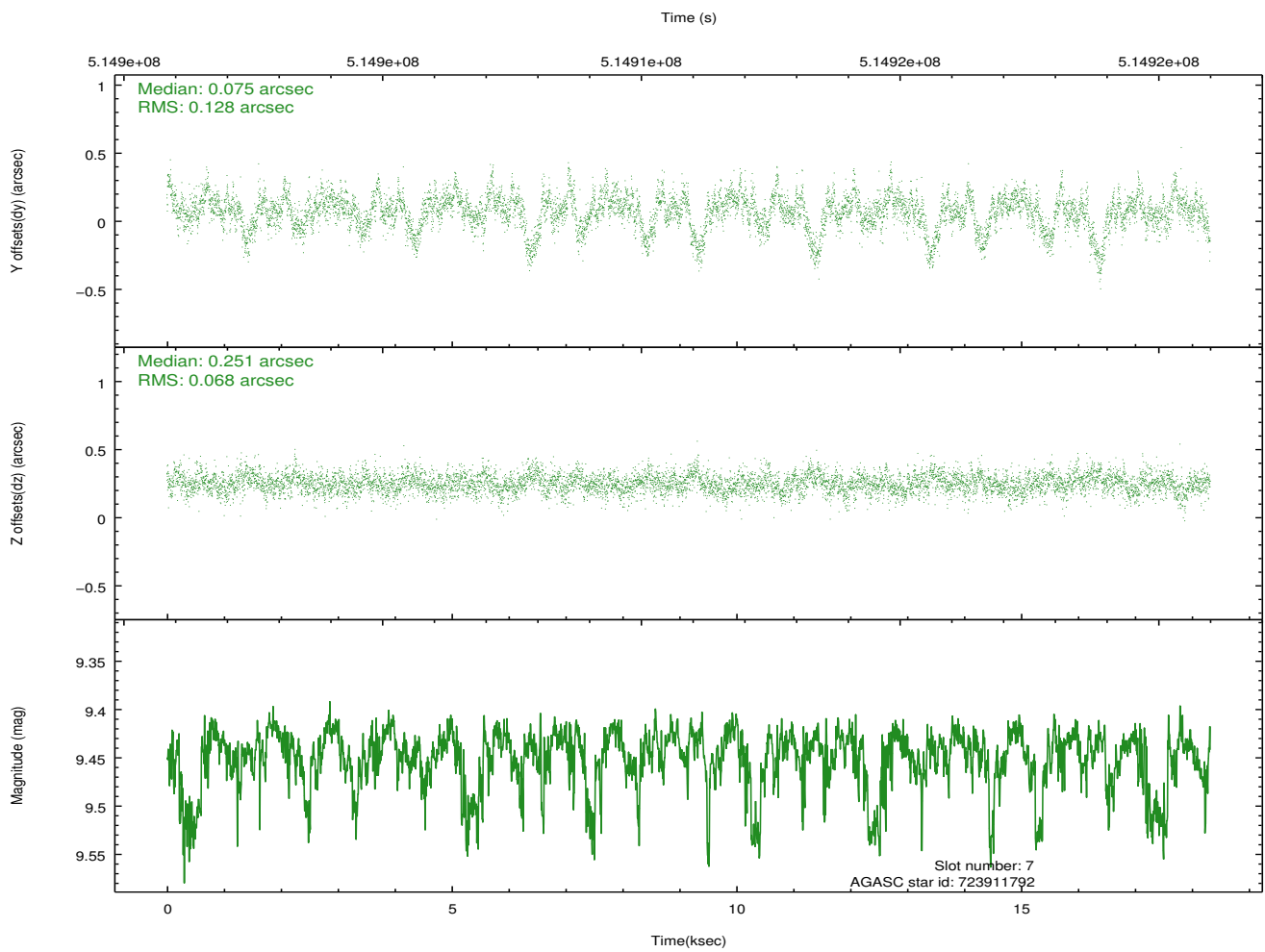
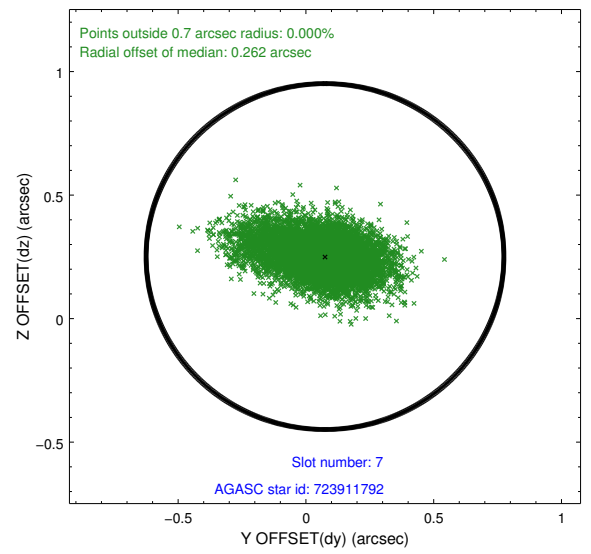
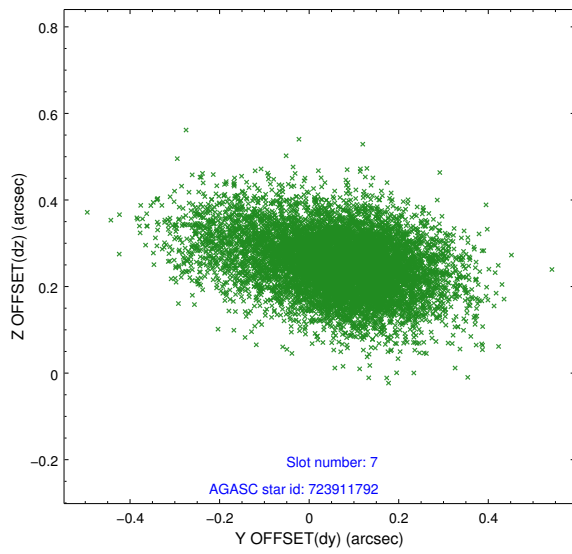
2.4.3 Slot 5



2.4.4 Slot 6

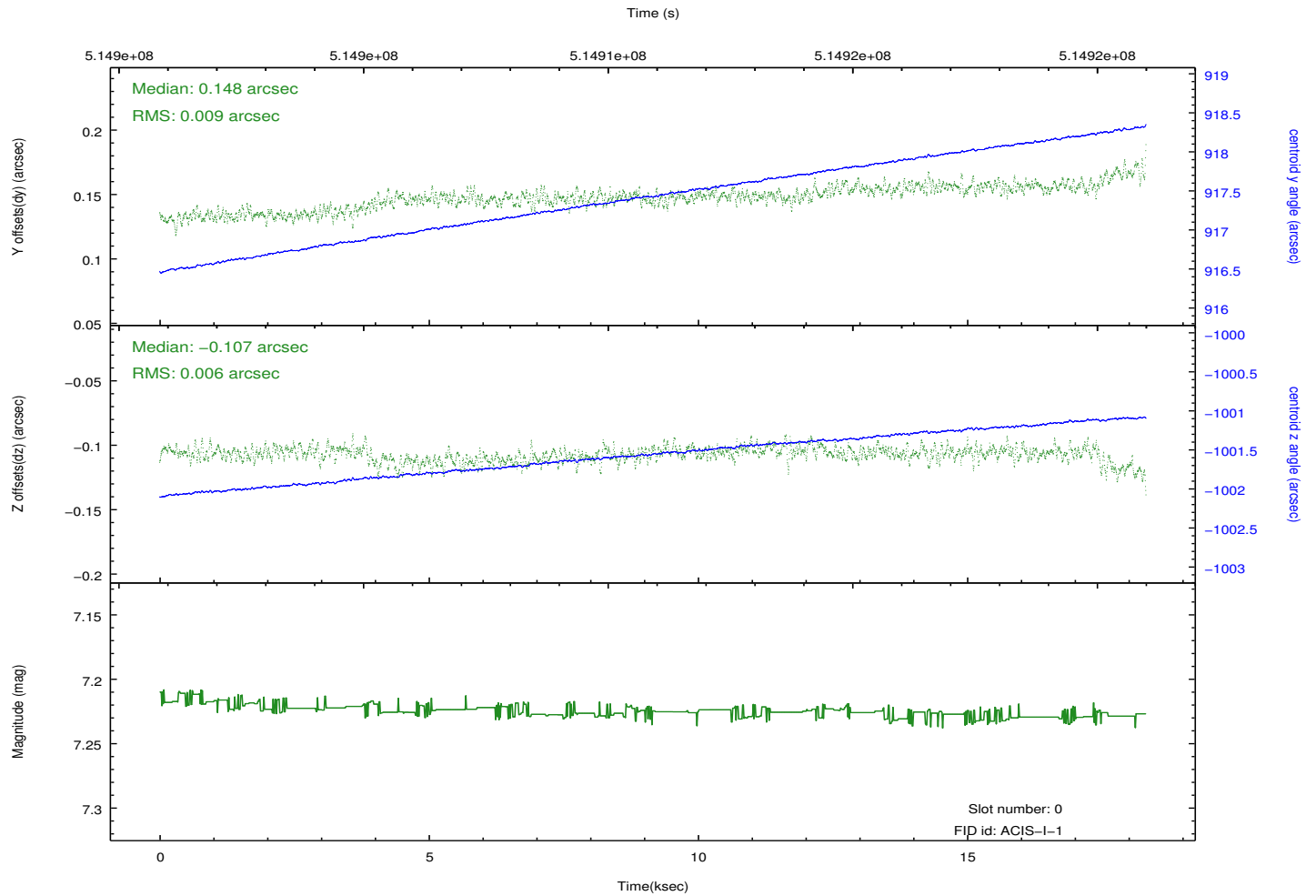
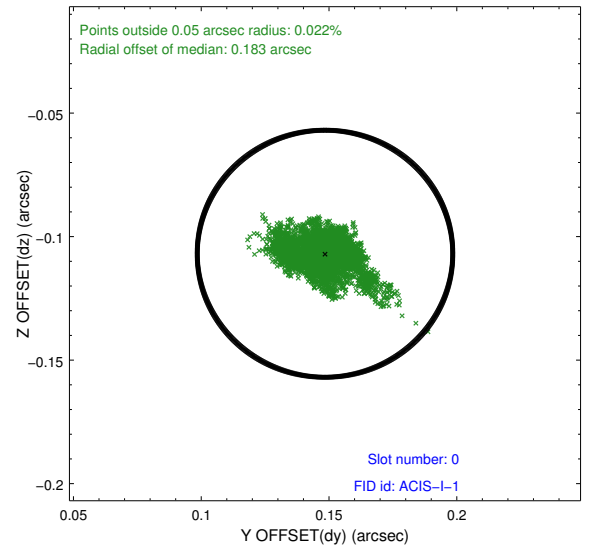
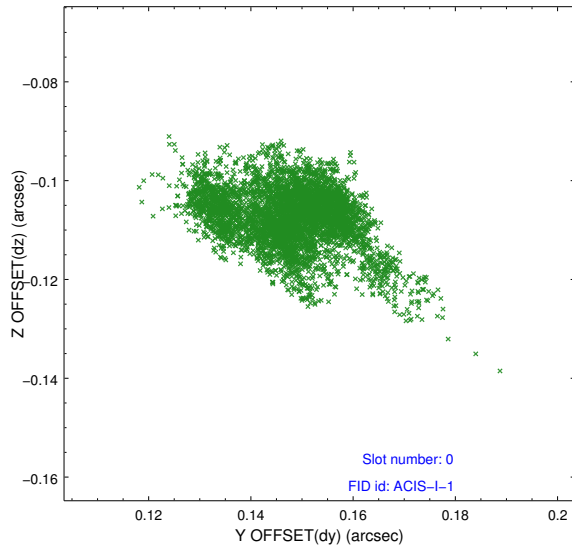


2.4.5 Slot 7

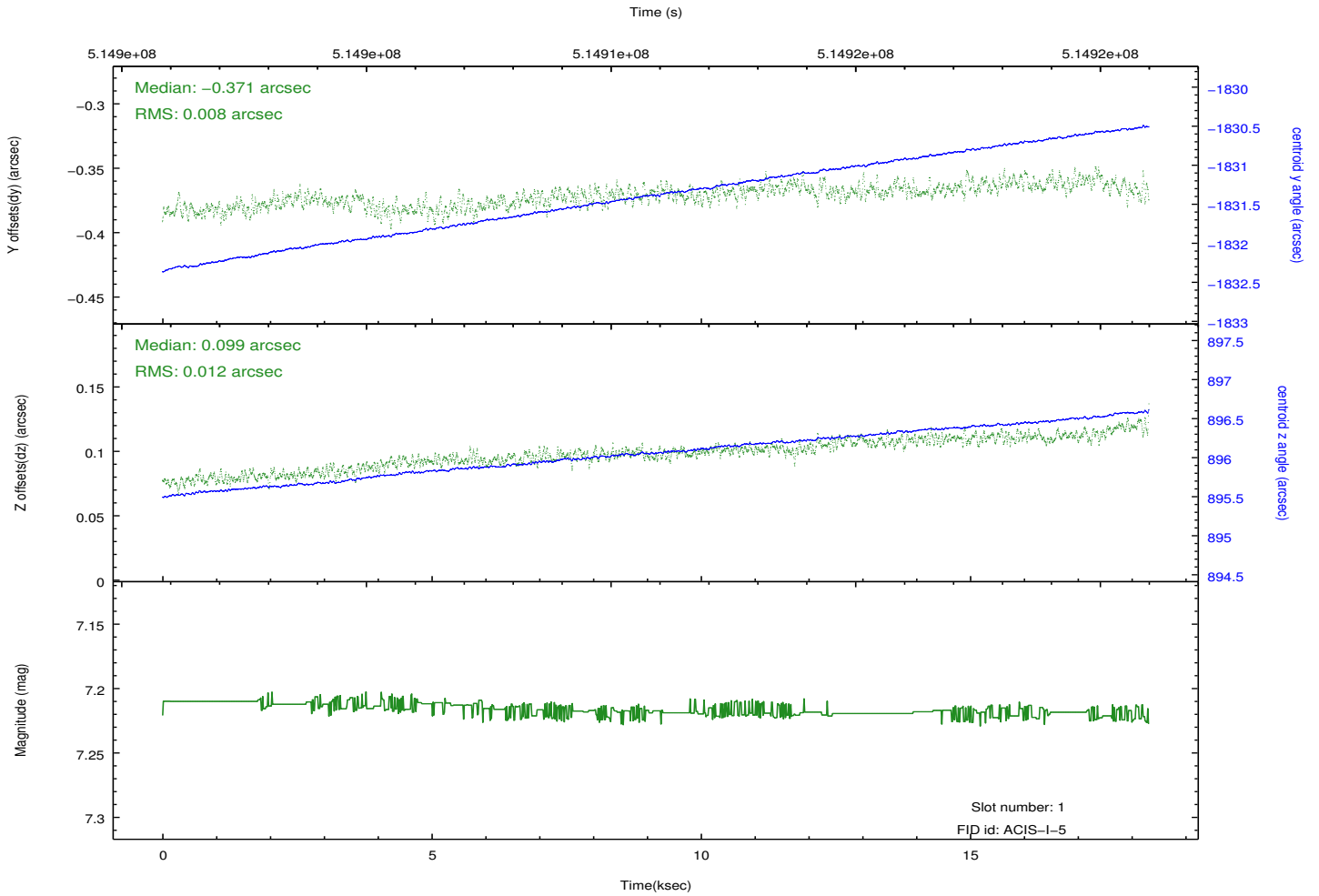
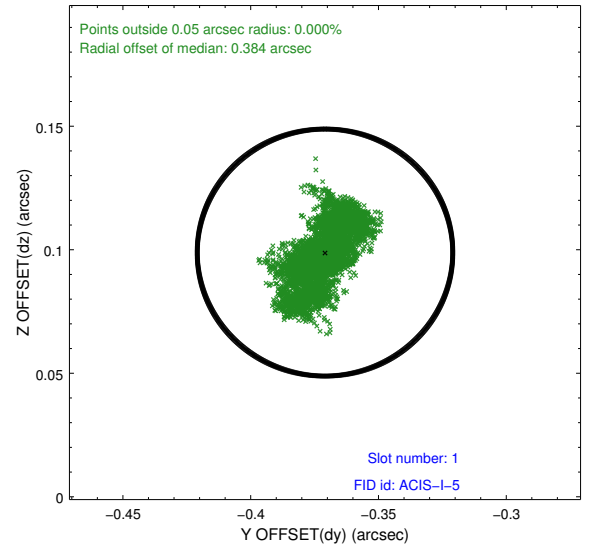
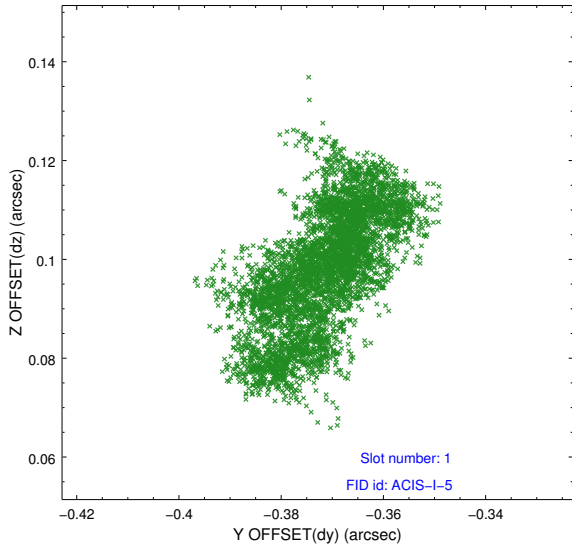


2.5 FID Slots

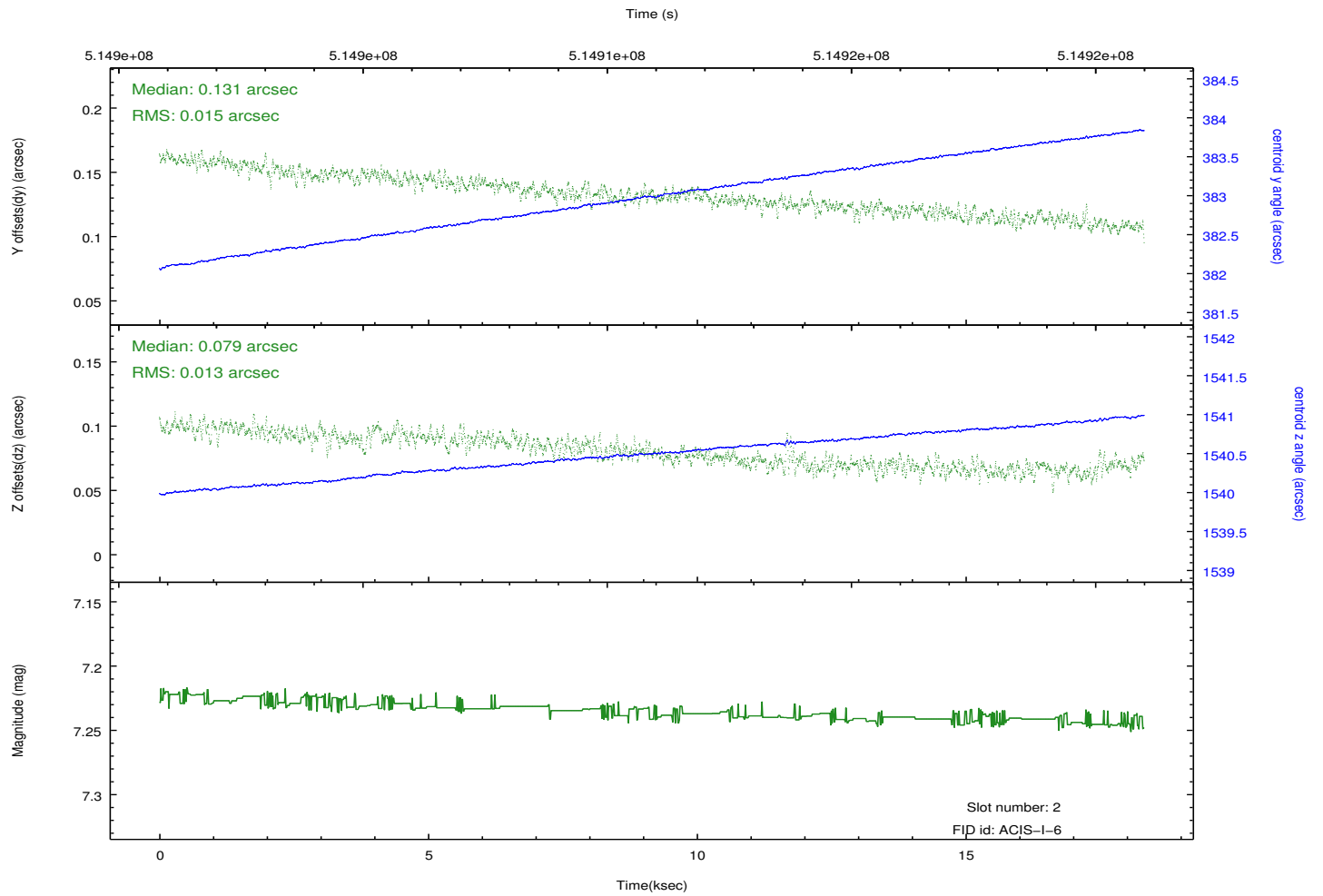
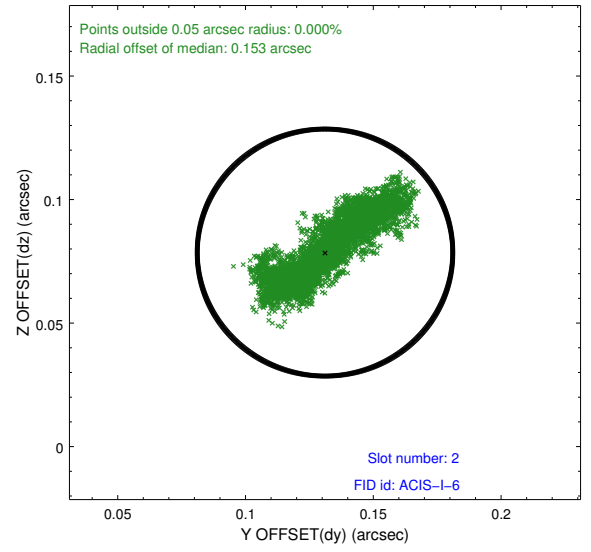
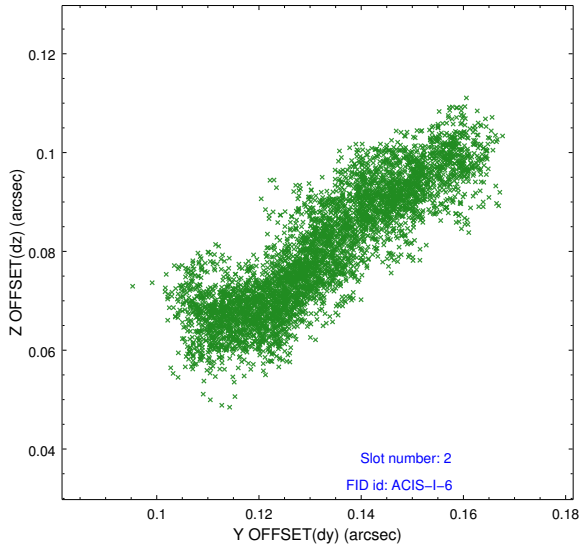
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	18.08230013907

A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.